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SURGERY OF CHRONIC PELVIC INFLAMMATION.

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It is not my purpose to bore you with a treatise on this subject as a whole, for that would necessitate the going over of a lot of text-book material which would prove tedious and profitless at this time; but to take up certain phases of the subject in which I have been interested, and to which I feel we should give more consideration.

By experience we have found that in a considerable proportion of the cases operated for chronic suppuration in the pelvis, the pus is sterile at the time of the operation. In a series of cases collected by Andrews (exclusive of tuberculosis)—634 cases in all—he found that bacteriological examination showed that 55 per cent. were sterile; 6 per cent. contained saprophytes; 22.5 per cent. of Gonococci 12 per cent. of Streptococci and Staphylococci; 2 per cent. of Pneumococci, and 2.5 per cent. Bacillus Coli Communi. A late collection by Hyde—2973 cases in all—(exclusive of tuberculosis), the bacteriological examination was approximately as follows: Sterile, 1998; gonococcus, 579; other bacteria and mixed infection, 456.

Long ago it was observed that of the cases subjected to abdominal section for pelvic suppuration, the old cases promptly recovered, usually without trouble, while the recent cases frequently developed a fatal peri-

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tonitis; that is, that operation in the acute stage was far more dangerous than in the chronic stage. This fact, after having been clinically established, was the occasion for much discussion as the explanation was not at hand, and it seemed hard to believe that a long continuation of a debilitating process could put the patient in a better conditon for a serious operation. One theory was that the immunity was largely due to the local effect on the adjacent peritoneum, reducing its absorptive powers and rendering it an unfit culture ground for bacteria. Another theory was that the body resistance became accustomed to the local irritation in the pelvis, and was consequently less disturbed by the added irritation of the operation, and that, also, owing to the long preparation of the body forces, they were better able to combat invasion. The explanation while crude to us, with our knowledge of the resistant function of the leukocytes and blood serum, and the antitoxin and vaccine theory, at the same time, contains truths which have only been verified and elucidated by this knowledge. The decisive step in the solution of the question was solved only when a systematic bacteriological examination of specimens removed was made. Then it was found that in a considerable number of the cases bacteria were absent. The reason immunity was conferred by waiting was because the bacteria had died and disintegrated, and the pus was sterile. This was the reason, in the old cases, that no bad results were obtained at times even when pus was free in the abdominal cavity. On the other hand, in the fresh cases, the bacteria were alive and active, and the least contamination frequently resulted in a fatal peritonitis. Another fact established in the old cases was that, even if bacteria were found, they were so attenuated that the pus was practically sterile.

It having been established that sterilization takes place within a reasonable time in all cases, the next problem is to determine the length of time required for automatic sterilization or attenuation, in the different classes of cases.

The persistence of virulence depends largely on the character of the infection. The two principal agents in chronic pelvic inflammatory trouble are the gonococcus and the streptococcus. These two differ widely in the persistence of virulence and also in certain clinical characteristics which can be distinguished before operation. For the purpose, then, of considering the persistence of virulence in a practical way, i. e. as a guide to treatment, the causes of chronic pelvic inflammation (tubercular excluded), may be divided into two classes: the gonococcic and the streptococcic. To be useful, the classification must be made before operation, that is, it must be a clinical rather than a bacteriological classification. Of course, there are other bacteria causing pelvic trouble, but in the present state of our knowledge they cannot, as a rule, be distinguished before operation; and, if they were distinguished, not enough knowledge has been accumulated to show the average persistence of virulence. Consequently, the endeavor should be to decide whether a given case belongs to the gonococcic or streptococcic class, ignoring for a time the fact that it may be due to other bacteria which, in point of virulence, belong between the two extremes.

How are we to distinguish between the two? Unfortunately, the bacteriological examination of the uterine, or urethral discharge, is of assistance in only a small proportion of cases, for, as a rule, the bacteria have disappeared. We have no characteristic reaction in these cases corresponding to the tuberculin reaction in tuberculosis; hence we must depend

on the clinical manifestations before operation. Fortunately the gonococcal and streptococcal cases differ usually in two particulars, namely: (1) Apparent cause of the trouble; and (2) the location of the lesion. As a rule these points may be settled and the case classified by an accurate inquiry into the onset of the trouble, and a careful bimanual examination. Uncertain cases are to be classed with one or the other as the evidence seems to warrant and then treated accordingly.

In the gonococcal class (clinical), the distinguishing points are, **first,** that the pelvic lesion is preceded by evidence of gonorrhea, or comes on apparently without cause; and **second,** that the trouble is located in the tube, or by extension, in the ovary, or adjacent peritoneum. Gonococci are the only germs that will spontaneously invade the healthy non-puerperal uterus, except, perhaps, in children; so that in adults a purulent inflammation beginning spontaneously in the vagina and extending into the uterus and out into the tubes, may be classed as almost certainly gonorrheal.

The history must be carefully taken, however, to exclude any traumatism in the form of miscarriage, or instrumentation. The probability of gonorrhea is increased if the patient gives a history of a leucorrhoea beginning a few weeks after marriage. Again, in a large number of cases of gonorrhea, the discharge is accompanied by a urethritis, resulting in a burning and irritation, and a frequent desire to urinate. Then, too, gonorrhea is frequently accompanied by abscesses of the vulvo-vaginal glands. Very seldom are these abscesses produced by any other infection. In these cases where the vaginal or uterine gonorrhea did not cause noticeable local disturbances, the pelvic suppuration began without apparent cause. A rather large percentage of gonorrheal cases will give such a history. In these cases we must be especially careful not to overlook an early miscarriage.

On examination a search should be made about the external genitals for signs of an old gonorrhea, such as red spots (maculae gonorrhoica), or secretions pressed from the urethra, or vulvo-vaginal glands, which will show the presence of gonococci. Negative microscopic examinations do not, however, exclude a previous gonorrhea.

For a certain proportion of cases, the extention of the gonorrhea may have taken place into the uterus, and beyond, during the puerperium. Gonococci may be practically dormant in the lower part of the genital tract for a long time, and extend upward after labor or a miscarriage. Puerperal infection due to the gonococcus is nearly always mild, and such a history may help some, but there are other types of mild puerperal infections. In these puerperal cases, therefore, without other evidence of gonorrhea, the decision will rest upon the location of the lesion.

The extension of gonorrheal inflammation is almost invariably along the uterine mucosa into the tubes. Gonococci very seldom, if ever, extend through the uterine wall into the para-uterine tissue. Steinschneider and Schaefer injected pure culture of gonococci into connective tissue, with no decided inflammatory result following. The characteristic lesion of gonorrhea in the pelvis is pyosalpinx, with or without oophoritis and pelvic peritonitis.

The majority of pus tubes are due to gonorrhea, known or unknown, as we know that gonococci often die in a short time, so it is probable that most of the sterile cases originated from the gonococcus.

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Crossen, in a recent paper bearing on this subject, cites a series of cases tabulated from his own work and those others, and shows that where the two clinical signs agreed, the bacteriological examination of the pus either showed the presence of gonococci or the absence of bacteria, with the exception of one case, in which the pneumococcus was demonstrated. In the series where the two points did not agree there were various bacteriological findings. In the uncertain cases the location of the lesion was principally depended on for the classification. A marked tubo-ovarian mass, without parametrial involvement, except in clearly puerperal cases, admitted the case to this class, and in no instance did such a case show streptococci.

In clearly gonococcic cases the germs are usually attenuated or absent in from two to four months from the onset of the trouble. It is wise, then, in these cases to wait for this to take place, as abdominal operation then becomes safe, or may be avoided entirely in a certain number of cases. Active gonorrheal pus is by no means harmless, and operation done early may result in a general peritonitis and death, or a local peritonitis with adhesions and their various sequelae; or even of dissemination through the system, resulting in an involvement of joints and the endocardium.

In the streptococcic cases (clinical), the distinguishing characteristics are, again: First, the apparent cause of the trouble; and second, the location of the lesion. Nearly all streptococcic inflammatory trouble in the pelvis can be traced to sepsis following labor, or a miscarriage. In adults streptococci do not spontaneously penetrate the non-puerperal uterus, except where some trauma is done to the uterus, or some abnormal condition exists, as cancer, or some chronic inflammatory trouble, and unless a pelvic inflammatory trouble can be traced to some of the above causes, the infection is certainly not streptococcic. Care, therefore, must be taken in obtaining the history not to overlook these conditions. On the other hand, not all puerperal cases are streptococcal. About 25 per cent of puerperal infections are gonorrheal, but they are usually of a mild type, and subside quickly; but we must remember that some streptococcic cases are of a mild type, so that, aside from extreme evidence of gonorrhea, most dependence must be placed on the location of the trouble. Streptococcal lesions are usually parametrial, while gonococcal lesions are usually tubo-ovarian.

We should bear in mind, too, that one may be dealing with a **mixed infection,** which may cause both lesions in the same patient, so that extreme caution in puerperal cases msut be used before making a classification.

A chronic lesion in the pelvis due to streptococci is almost invariably in the connective tissue. The streptococcus does not progress along the mucosa of the uterus, as does the gonococcus, but invades the wall of the uterus, and attacks the parametrium, and then the peritoneum. If streptococci do invade the tube, they probably pass out through the fimbriated extremity, and produce a fatal peritonitis. Consequently, in the streptococcic cases that survive the acute attack and become chronic, the lesion is almost always found in the parametrial connective tissue.

Whitesides and Walton tried to produce streptococcal salpingitis experimentally by injecting pure cultures of streptococci and also mixed cultures of streptococci and staphylococci into the uterus of rabbits. In no case did a salpingitis result. One case died of streptococcic septicemia; while the other developed a purulent vaginitis for a few days, and then recovered.

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In bacterialogical examinations in cases of pelvic inflammation where streptococci are found the lesion does not involve the tube alone. The cellular tissues are also infected. Other pus organisms cause parametrial masses, but not often, and as streptococci are usually the cause, every case presenting parametrial involvement should be placed in the streptococcic class until definitely proven otherwise.

The distinguishing characteristics of a parametrial mass are:

1st. Its situation in the connective tissue areas, usually in the broad ligaments.

2nd. Its low relation to the uterus.

3rd. Its intimate blending with the uterus.

4th. Its intimate blending with the pelvic wall; and

5th. Its hardness.

A tubo-ovarian mass, on the other hand, is distinguished by its being situated higher up, or, prolapsed into the cul-de-sac; by its not blending with the uterus or pelvic wall; by its presenting a groove between the mass and the uterus; by its rounded outline, and its lack of hardness.

A series of cases compiled by Crossen showed that where the trouble originated from labor, or abortion, and where there was present a well-marked parametritis, streptococci were almost always found.

Where the two points do not agree, then the principal weight should be given to the location of the lesion, and the uncertain cases classed with the streptococcal cases.

The virulence of the streptococcus persists indefinitely. Cases have been reported where they persisted for six and twelve years. Automatic sterilization of a streptococcic abscess is so rare that it is not counted on, and consequently a streptococcal mass in the pelvis is always dangerous, and abdominal section of same, at any time, is liable to be followed by a fatal peritonitis. The only safe way to operate for a streptococcal collection of pus in the pelvis is by the extraperitoneal route, preferably, the vaginal. Intraperitoneal operation in these cases should be done only when the patient's life is threatened by the severity of the inflammation, and when it is impossible to reach the mass in a less dangerous way.

I claim no originality for the points here presented, nor for some of the arguments used in presenting them to your consideration. Because of experiences I personally have had, and observations I have made, I am convinced that fatalities occur in the surgery of chronic pelvic infections which might be obviated if these few facts were more often discussed.

The Chairman: Dr. Howard's paper is open for discussion, gentlemen.

Dr. Wall: The last part of the Doctor's paper was interesting to me. As I consider it, the diagnosis is the important part in pelvic inflammation. Any doctor can do the operating after he knows what is the matter. There are a great many ways open for pelvic infection for which there are different causes. We know that it is occasionally and often quite difficult to make a close diagnosis as to the cause of the infection, and that is certainly an important part to the patient, as well as to the doctor. No man

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can be a safe operator who opens the abdomen without some knowledge of the cause of the infection, and so forth. There are different kinds of infection, of course. Streptococcal infection is the one that is likely to cause the most trouble, because it has been proven by men of experience that streptococci germs live on indefinitely in the tissues around the uterus. It may be difficult to ascertain whether the woman has the condition that we seek, but the main point is in the diagnosis.

Dr. Berry: I was interested in the paper and the gentlemen who discussed labor and when it is right or best to operate. In my opinion we have a good many patients killed by unnecessary operations along this line. The fellow that gets in there in the last stage is going to kill his patient. It is sometimes very difficult to make a diagnosis of this class. I will illustrate the point by relating a case that came up five weeks ago last night, when I was called to a neighboring town to see a case. In the examination I found a mass in the left pelvic cavity and a good deal of tenderness and a very good discharge. Fourteen months previous the woman had been confined. Her husband had infected her with gonococcal infection—this was proven by an examination of the infection. The woman had a temperature of 102. We made the diagnosis and I advised waiting until she passed through the period of cooling off. Incidentally, before we got through with this case the woman pointed out pains in the region of the gall bladder and on examination we found an elongated pear-shaped thing, and I believe we pronounced it merely a distended gall bladder as an incident to the case and passed it over as no matter to get us into trouble. I afterwards returned home and the next evening got a message that the woman had 103 temperature and was suffering with intense pain in the gall bladder and that I had better come prepared to operate on the gall bladder. So I got the train and went over and found that the pelvic trouble was secondary, and to make a long story short, I made an incision and took out sixty-nine gall stones, one 3⅛ inches in circumference. The peculiarities of this case were that the pelvic symptoms proven and the gall bladder had given no trouble. There was no pus in the gall bladder, but I made the incision large enough and put my hand into the pelvis and found membranous adhesions around in there. I did nothing to anything but the gall bladder and let the woman alone and in thirty-six hours her temperature was normal and has been since, and while she had a little pelvic tenderness for five or six days, has none now. I saw her attending physician a few days ago and he told me that trouble had disappeared. I cannot understand why her temperature would come from the gall bladder when it was not infected and when it is infected usually does not have a high temperature; and why should this temperature go down so rapidly when nothing was done with the pelvis, if this was the cause of the high temperature? It illustrates the fact that no case is subject to a snap-shot diagnosis and you should never operate pelvic infection until we see that it is the last resort and that it ought to be done. We do have these cases entirely recover without operation.

Dr. Blesh: It gives me great pleasure indeed to discuss this paper of Dr. Howard's since not only the subject but the author's treatment of the same is well worthy of it. Pelvic peritonitis is rare in the absence of conditions dependent largely upon the peculiarities of the gonnococcus, that is to say a gonorrhoeal pelvic peritonitis. In my opinion the Fallopian tubes which are the atrium by which practically all infections reach the pelvic peritoneum, are rarely involved without the presence of one or more of the following conditions: (1) Curettage, (2) Abortion, (3) Labor

at term. Before coming to this session I took the pains to review our work along this line and there were but few instances in which the history did not show one or more of these factors to be present, it being understood of course that the necessary gonnococci were resident in the tract, and indeed it is quite clear upon a moment's reflection why this is true. In using the curet, which now is quite too much the fashion, the physician opens the uterine ostium of the tube which is sealed in the case of pregnancy and often too as protective measure in endometritis. This offers an open pathway to the pelvis and in the high state of physiological activity incident to the pregnant state, the infection promptly follows until it drops into the pelvis from the fimbriated end. Moreover it seems to be the boast of many good operators to call attention to how thoroughly they curet the uterus giving the instrument an extra whirl or two around the tubal cornu. Now should the tube be infected and open this act tends to freshen and seal it if unfortunately the operator is successful in the maneuver and if it is sealed by nature as a protective measure he opens it to the entrance of the infection.

As stated above I reviewed all our cases of this trouble before coming and find a support for the above statements in fully 90 per cent of them. The fact that prostitutes are the most common sufferers from pelvic peritonitis has ben urged as an argument against this view. In reply I would say that there is no class in whom abortions and the indiscriminate use of the curet is more common than here. Dr. Kerley, who is here present, will recall one case in support of the above contentions.

As to the time for operation in pelvic peritonitis I will merely say here that the same rules apply as are accepted elsewhere. That is do not operate or attempt to do so during the progress of a too active inflammation or you will often meet with disaster. Endeavor to move surgically when the differential blood count shows a falling line for then you will strike in with nature and the very stars in their courses will be fighting with you and you will be surprised at how mountains of pathogical difficulties will melt away before you. The falling differential line indicates that the polymorphonuclear blood cells, the really active fighting factors, are out on the firing line, therefore not in the blood stream, hence co-operating with you. A more or less successful operation may be done at any time but the game is too much of a chance, no matter how skilful the operation. In this day our patient is indeed entitled to every safeguard that we can by the exercise of the most careful clinical judgment and the aid of the laboratory, throw about her. Again I thank the doctor for his most excellent paper.

Dr. Clark: I did not hear all that Dr. Howard read this morning, but from what I got one thing occurs to me, and that is that we are lax in our diagnosis. There are good men that know what to do, but the question is when to do it. Dr. Howard's paper dealt with the effect, and the thing we need to prepare for is to understand just what effect we will have, and that ought to be emphasized. I want to say that all gonococcal conditions do not call for immediate operative interference. That often leads to disastrous results. There appeared, in days gone by, an inclination to get into them as soon as possible, but that is not right. Another thing, or the one thing we ought to do, either ourselves, or have some one do for us is to make a differential blood diagnosis. We ought to wait until we can determine what that is. We ought to study very

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carefully the conditions and at the instant that reaches eighty or better, if we ever intend to do anything for the patient that is the time. I believe the men that are doing that class of surgery today ought to be able to do that. The reports of the best men of today are all agreed on that one principal. At least that was so a few months ago. They agree we should study carefully the blood condition, make special note and at any moment eighty is reached if we ever expect to do anything for the patient we must do it then. That may conflict with statements made here, but that is as given by men of wide experience.

Dr. Jolly: I appreciated Dr. Howard's paper and I want to make some remarks about the discussion. I believe that operation, so far as the curet is concerned in gonococcal infection is disastrous. I believe we have pus tubes following those cases and where there has never been an abortion or childbirth. I have heard of cases during my practice of pus tubes not following either one. I do not know what per cent, but I do know it is without these three conditions mentioned.

The Chairman: If there is no further discussion I will ask Dr. Howard to close the discussion.

Dr. Howard: I thank the gentlemen for their kind discussion of the paper and in helping me bring out some points I was trying to make. My object in reading this paper was not to bring anything new before the association, but only to emphasize some of the points on the diagnosis of these conditions and show the importance of arriving at the diagnosis, not after the time of operation, but before the attempt to operate is made. We can divide our cases into two classes: the gonnococci and streptococci. We will have other things producing trouble similar to these, but because of the fact that we do not know how long it takes for these organisms to become automatically destroyed it seems better to restrict to those two classes, because of the fact of the time.

It is important that we arrive at the diagnosis before bringing the patient to operation, especially a clinical diagnosis.

SYMPATHETIC OPHTHALMIA.

Edmund S. Ferguson, M. D., Oklahoma City, Oklahoma.

Sympathetic Ophthalmia, or transferred ophthalmitis, is an inflammation involving the iris, ciliary bodies, and choroid of one eye, following an inflammation at some previous time of the same parts in the other eye. This transferred inflammation may take place at any time from three weeks (one case reported as early as ten days) to forty years or more. Ophthalmologists have for many years been studying this interesting disease, only to be left in the dark as to its real cause and probable route of transferrence from one eye to the other.

Traumatism, in the region of the cornea-scleral junction, whether accidental or following an operation for glaucoma, cataract, discission, et cetera, is one of the chief causes. It is not simply the injury itself in the ciliary region, but a wound in this region which has become infected is more likely to produce sympathetic trouble than are similar wounds in other parts of the eye. Penetrating wounds, where the iris is prolapsed, or foreign bodies, such as pieces of steel, copper, stone or glass, remaining in the eye, are followed at times by attacks. Wounds through any part of the eye,

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other tha nthe cornea-scleral margin involving the iris and ciliary body, even though they are severe enough to produce traumatic cataract, rupture of choroid, etc., are not likely to produce sympathetic trouble. Tumors of the globe, particularly, melanoma-sarcoma, and cysticercus, have been given as causes, but this is probably doubtful. It has been found that an irido-cyclitis is always present in the exciting eye, hence, in all probability, an infection takes place at the time of the injury.

Just how this disease is transferred from one eye to the other is not understood. Various theories have been advanced only to be found insufficient upon experimental investigation. Hutchinson's theory that the infection was carried through the optic nerve, prevailed for some time, and owing to the anatomical fact of the crossed and mingled fibres of the two eyes at the chiasm, it seemed almost positive. It was found, however, that even though the optic nerve was severed, sympathetic trouble might still take place. This theory was also questioned because, if true, it would seem necessary for the inflammation to begin at the papilla or nerve head. This is not the case, so the theory of direct transmission through the nerve has been entirely abandoned. The next theory was that the disease was transmitted through the ciliary nerves because they directly supplied the uvea. This was questioned at once as there is no direct connection between the ciliary nerves of the two sides, and the only way for transmission through this route would be reflex. This may be true in sympathetic irritation as there is then no inflammatory condition present. To demonstrate the reflex act it is only necessary to get a foreign body in one eye and see how quickly the other sympathizes by lachrymation, and sometimes by photophobia. The accepted theory, today, is that the sympathetic inflammation is of bacterial origin, and the method of transmission is through the blood stream; these bacteria being only pathogenic in the uveal tract, as no other tissues of the body seem to be affected.

The bacteria has never been isolated, and research work has been handicapped owing to the impossibility, so far, of producing the sympathetic trouble in animals, and the inability of examining the sympathizing human eye in the early stages. Could we find a patient willing to sacrifice his only remaining eye at the beginning of the transferrence, much more light might be thrown upon this obscure disease. Romer insists that a careful examination of the blood in these patients should always be made, and it is probable that the invading bacteria will yet be located in the blood stream, unless it be proven that the transmission takes place through transmitted toxins, or products of bacteria, rather than by the bacteria themselves.

An irido cyclitis is always present in the eye which causes sympathetic trouble. This irido cyclitis is generally of plastic variety and practically always of traumatic origin. Of course, there are great numbers of cases of irido cyclitis which do not produce transferred ophthalmitis, hence the difficulty of reaching a decision as to whether or not an eye should be enucleated. In some cases the eye with primary inflammation may still retain some sight, though remaining tender indefinitely. When once the inflammation is transferred, enucleation of the exciting eye has little or no effect on the progress of the disease in the fellow eye. Frequently, if vision in the injured eye has not been entirely lost when the trouble in the other eye sets up, it is found to be the useful eye when inflammation in the sympathizing eye subsides. For this reason do not enucleate

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an eye, with vision, after inflammation once is established in the other eye.

Fuchs has added much to our knowledge of the pathology of this affection. He found a dense infiltration of the uveal tract. The infiltration was mostly lymphocytes, small round cells with one nucleus and very little protoplasm. In this infiltration he also found large epithelial cells, with one nucleus, assembled in groups; and regular giant cells in all probability developed from the epithelical cells. The choroid is much thickened, and the inner surface often wrinkled; the whole uveal tract is infiltrated, but mostly in the vascular layer of the choroid. Fuchs was unable to demonstrate bacteria, but does not doubt their presence, and that instead of causing an acute suppuration, they create an inflammation which is transmitted through the circulation to the fellow eye.

In mild cases with photophobia; lachrymation deposits on the posterior surface of the cornea from irido-cyclitis; slight redness of the eyeball; posterior synechia, and cloudiness of the vitreous, the symptom may soon subside, leaving the eye almost as useful as before. Unfortunately, this favorable termination is rare. As a rule, the inflammation quickly spreads and becomes intense; the posterior adhesions increase, either producing a seclusion of the pupil, or a pupillary membrane is formed and the vision is very greatly reduced. At first there is an increased tension which varies greatly as the disease advances, ranging from a high glaucomatous stage to a very greatly reduced tension at the end of the attack. Cyclitic membranes form not only around the pupil and lens but also throughout the vitreous chamber and a general atrophy of the eyeball soon follows. In the early stages, before the occlusion or seclusion with the glaucomatous symptoms, which inevitably follow, there is not much pain, and the greatest complaint of the patient may be simply failing, or hazy vision. The course of the disease is tedious and constitutional symptoms such as quickened pulse, great thirst, and pallor, are present. Frequently there is an obstinate constipation. The sympathizing eye is usually lost even though recovery from the first attack encourages you. It is generally soon followed by another and another attack until it is finally lost, and, if the exciting eye is not entirely blind at the time of the onset of the inflammation, it may be, and likely will be, the better eye in the end.

In making a diagnosis in this disease, the history of the condition of the exciting eye will be of the greatest help, and will immediately arouse suspicion. Severe attacks of pain, with cloudiness of media, ciliary pain, and thickened iris—indicating infiltration in uveal tract, accompanying the train of symptoms, as outlined above, in the fellow eye, will soon convince you of the nature of the disease.

Remember in making a diagnosis, giving a prognosis, or in treatment of an inflamed eye, which may follow or accompany a violent inflammation in the other eye, that sympathetic inflammation is not to be feared in absolute glaucoma; in perforating serpent ulcers with staphyloma; or in pan-ophthalmitis and shrinking of the eyeball. This is important for the reason that you need not hurry an operation during the acute stage of these affections, fearing destruction of the remaining eye.

In the treatment you should consider the prevention first, and afterwards the cure, should the disease actually exist. In prophylaxis you should anticipate trouble from the nature of the injury or character of inflammation, in the primarily affected eye. Wounds in the region of the

ciliary bodies; foreign bodies remaining in the eye, or infections following operations at the limbus, which set up an irido-cyclitis and remain tender for any length of time; where vision is lost or partially so, should be removed, for should this immediate attack subside, months or years afterwards a sudden transferrence to the other eye may appear, and when once begun it is too late to enucleate the offending eye with any assurance of success. The deformity attendant on removal of an eye must not deter you when you are satisfied that there is danger, and you should shift the responsibility should your patient object to the carrying out of your advice.

When once the sympathetic inflammation has been established, treatment is much restricted and we have no specific. Absolute rest and darkness are especially essential. A close-fitting bandage continued for a long time is indicated. Gifford recommends very large doses of solicylate of soda, and, in the light of our present knowledge, this remedy probably does promise the best results. He claims that one grain for each pound of body weight can be given daily. As this remedy must be used for some time, the dosage must be determined by the tolerance of each individual case. Atropine should be used locally unless it produces increased irritation of the eye, or there is marked increase of tension; calomel internally, or inunction of mercury, seem to have beneficial effects. Produce free diaphoresis with either the vapor bath or pilocarpine. The general condition of the patient should be considered, and if debilitated, tonics should be administered.

In a certain number of cases some vision may be left after the attacks, in others, complete loss of vision, with phthisis bulbi results. In still other cases where there remains a complete occlusion of pupil and cataractous lens with fairly well preserved eye-ball, an operation may be tried. Still, iridectomy or iridotomy, with removal of lens, is very difficult, and rarely successful. It is not advisable to attempt an operation of any kind until the eye has remained absolutely quiescent for some time.

The serious nature of the disease presents to us grave responsibility in all injuries of the eye, particularly when that injury is in the region of the iris or ciliary bodies, or whenever a plastic iritis or iridocylitis follows injury, or some one of the eye operations.

DISCUSSION.

Dr. Stookesberry:—I do not know as I have much to say, except that I enjoyed the paper. There are a great many points there of interest which have been brought out and which seem to me would help us in cases along this line if we will remember the points. The great trouble I have found I have never had a great number of these cases and what I have seen have gone to the bad, but I am glad to know that we are getting nearer to the conditions than before. I believe before very much longer we will attend to it more effectively. I do not know as I am capable of saying much along this line, as I have not had experience—except in hospital work—my private work has been very much limited. What I have seen has been along the line the doctor suggested in his paper.

Dr. Barnes:—I want to emphasize one point the doctor made in his

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paper in regard to prophylactics. I never had a case of my own, and those I have seen and heard of and in the hospital under the direction of some one else have been very unsatisfactory. I have never been able to find anything that did any good to sympathetic trouble. I have seen some cases treated and have carried out the treatment of mercury and salt injections and all those things, but they are all unsatisfactory. The point I want to emphasize is that we should use our efforts in getting the patient to remove the eye in those cases where we suspect sympathetic ophthalmia. The doctor brought out the point that we must take into consideration the degree and extent alone in the ciliary region, and the character of the wound has a great deal to do with that.

Dr. Leeds:—If I understand it right I am the only general practitioner here tonight, and I really feel like I suppose Jesus Christ did when he was between the thieves—

Put him out!—Anon.

And I want to say the same thing my wife said when I read my paper to her: "If I understood more about the subject I would appreciate the paper better, but I know it is a good paper, because you could not write anything but a good one." So I feel that way about the doctor's paper.

Dr. Newton:—I enjoyed the doctor's paper very much. I have had occasion to set up nights and study up on the subject. I had a case about three weeks ago that worried me very much. It was another strange case where a man suddenly regained vision after being blind thirty years. He was struck with a piece of wood thirty years ago and after that time was unable to see. He was struck on his head and his vision returned. He came to me soon after that and I saw what the trouble was. He had a dislocated cataractous lens, and I told him he ought to have something done for it. I did not insist strong enough to make him realize the condition, but I told him if he had any trouble to have something done immediately, and he came into my office three or four weeks ago and I asked him if he noticed any trouble in the eye, and he said at times the eye was a little sore and, as he expressed it, hot water ran out of it and he had an irritation in the eye, and I told him the condition and insisted that we make an effort to get out the dislocated lens, which I did, and then took the eye out on the second day after the operation for removing the lens. That the eye came out all right I believe is due to the fact that the inflammation had not reached a dangerous stage. As to the prophylactic treatment, it is not always an easy matter, regardless of how badly the eye is injured or damaged, to convince the patient to take it out. I had a case about four months ago when a man ran a small auger into his eye and to such an extent that the ball partially collapsed, and he would not have it taken out for a week. I think we should watch these points more closely in those dangerous wounds in that region where the vision is impaired beyond recovery and that we should insist on enucleation all the time. It is hard to get a patient to see that, though.

Dr. Davis:—The question brings to my mind the fact that this is one of the gravest questions that will come up in our practice; the re-

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sponsibility we have to assume in these injuries. The patient can still see out of the eye sometimes, but he has an injury of the lens and through the ciliary body and it is hard to tell him that he has to give up the eye. But I think it should be insisted on, because in these cases there is such a strong chance of it going wrong later on and the sound eye becoming affected and perhaps the injured eye, and that is the probability, will never be of any value. The doctor mentioned the case of the dislocated lens. It seems perhaps the best treatment, where the patient will consent to it, in a case of dislocation of the lens, to immediately enucleate. These nearly always result in sympathetic ophthalmia. And the same way with the retention of foreign bodies. If a foreign body is retained almost always there will be a shrinkage of the eye ball later on, and instead of keeping your patient under treatment for weeks or months, and then failing; it seems to me it is better to diagnose the case at once. In cases of this grave nature the enucleation should be made in order to save trouble later on.

Dr. Wilson:—I believe I understood the doctor to say that after sympathetic ophthalmia has set in it was useless to remove the injured eye. I do not remember having had a case of that kind, but I think most of the authors agree that often they lose the eye after sympathetic ophthalmia has been set up by the injured eye. As regards prophylactics, when a case comes to me and I am reasonably sure the vision has been destroyed, I simply tell them the eye should be enucleated, and tell them why, and if they ask me if there is anything else to be done I tell them, "No; all I can do is to take the eye out of your head." If a doctor is positive that way most generally they will consent to have it done. I never have seen a case of bird shot wound in the eye, where it penetrated but what I said to take it out right now, and the same thing with most foreign bodies; but it seems like bird shot is more apt to produce sympathetic ophthalmia, and I notice it invariably destroys the sight. I make it a rule, if I am reasonably sure the eye is gone, to insist and demand that it be taken out, if I treat them and am responsible for them; otherwise they can go elsewhere. I heard of a doctor in New Orleans—a boy came in with a bird shot in the eye and he said: "I will remove it at three o'clock this afternoon." I asked him why he wanted to so early enucleate it, and he said: "I have never had a bird shot in the eye, but where they lost it, and I have never seen where they did not lose the other eye if the eye is not enucleated. I have seen them go twenty years and lose the other eye then." And he spoke especially of the importance of removing the eye when it is a bird shot wound. I had a man come to my office within thirty minutes after he was shot and as soon as he came I told him to take the eye out. He said he wanted to consult with a doctor in Oklahoma City first, and he did. I think the doctor was Dr. Ferguson here. I told him I would be glad if he did. He afterwards lost his eye. I appreciated the doctor's paper.

Dr. Jenkins:—I am sorry I missed any of the paper. The part I did hear was very thorough and showed the doctor had given it a good deal of thought and attention and covered the ground very thoroughly, leaving nothing for us to say, any more than to report our individual experiences with the different cases we might have, which I think is the best part of an association, and a part that has given me a great deal of

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pleasure, in connection with the paper. My experience has been so limited it would not be worth anything, and so I will not discuss it farther than to express my appreciation of the paper. In my opinion it has thoroughly covered the ground.

Dr. McHenry:—I have nothing to add to the paper. It was very thorough and I enjoyed it very much. I have had two cases in the last year—not sympathetic ophthalmia, but cases that set me to thinking about sympathetic ophthalmia. One little girl had a penetration in the eye and coming through the iris to the pupil. I saw the case a few hours after the injury and advised enucleation, and by the next morning there was a great deal of inflammation in the entire eye ball. We did not enucleate for ten days, but about the sixth or seventh day it began to get so bad we took it out about the tenth day. An examination of the eye showed a very intense congestion and inflammation of the entire visual tract. Then I had a case where a child twenty-two months old fell from the second story of a hotel with a milk bottle in his hand. The bottle struck and broke and a piece of glass penetrated the eye, going through the edge of the lid and entering the eye ball just over the corneosclera, going about one-fourth inch into the cornea and into the selera, and the child was injured considerably. I saw it about four hours after it happened. The doctor attending started to give it chloroform and after a little bit it nearly stopped breathing. He used about fifteen drops. In this case the child was hard to do anything with, crying a lot and would squeeze the eye down. The inflammation has entirely gone down—that was about six weeks ago—and the wound has gone down. I have explained to the parents the danger of having the injury there, but have not advised removing the eye. In the first case it was not hard to advise. But in a case like this, the inflammation subsiding and the eye apparently well in a two-year-old child, it is very hard to say to the parents, "Let's take the eye out." There is a good deal of vision in the eye. It is a little bit hard in those cases to know what to do. When there is a foreign body in the eye we know it is necessary to remove it. Dr. Wilson said a shot was the most destructive foreign body. I have been brought to believe that a copper cap is the most dangerous as a foreign body, and a bit of stone next.

Dr. Jenkins:—I want to ask Dr. McHenry a question: How long has it been since the case of the child cut with a milk bottle?

Dr. McHenry:—About six weeks.

Dr. Jenkins:—And the inflammation has subsided?

Dr. McHenry:—Yes, sir; entirely, and did within ten days.

Dr. Jenkins:—You are pretty well satisfied there is none of the bottle in the eye?

Dr. McHenry:—Yes, sir.

Dr. Jenkins:—If that was my case I would not be uneasy about it. If a foreign body was in there I would be uneasy, but I do not believe we have any trouble now.

The Chairman:—I always appreciate Dr. Ferguson's paper; I have

met a good many injured eyes, and most always in the ciliary body, and I have not heard much of the sympathetic ophthalmia from the causes or the point the doctor brought out. I invariably insist on the eye coming out, and if they do not do that they can go elsewhere. As a rule none of the patients will last over ten days before they will submit to an operation—an enucleation.

About the worse case I have had, had some stone in the eye and a piece of can, and I have lost track of the case. I advised enucleation and it was refused. Most of the cornea was affected and it cut through the iris and into the lens and there were about seventeen pieces of stone into the boy's face and thirty-two into his body. He shot a rifle into a can of nitro-glycerin and it killed the boy in front of him. After a few days watching the eye I told them I would have nothing to do with it unless it was enucleated. That is the only case I had the experience with, but the last I heard of the case he was all right. I'll ask Dr. Ferguson to close.

Dr. Ferguson:—I want to thank you for the discussion of the paper. I have not much to add. One thing I want to mention again and that is where there is danger, grave danger of sympathetic trouble to remove the eye. The difficulty in most cases is the dread of the individual of the deformity. The loss of the eye always deforms, and I do not think there is any surgical work in this line that I dread like removing an eye; not for the work itself, but for the deformity. When you can do surgical work and correct a deformity, it is a pleasure, but when you cause it then it is rather a hard task.

In the case of Dr. Newton's, where he had the dislocated lens following the injury, I think it was probably fortunate he performed the second operation, or removed the eye, for the inflammation might have been in the other eye at any time.

The question brought out by Dr. Wilson about the bird shot being probably the most dangerous foreign body in the eye: I believe he said he did not know why it should be, but they are dangerous. My opinion has always been that gun shot wounds in the eye were usually in the anterior part of the eye and in most of the cases the ciliary body is injured and a bird shot as a rule goes through one coat of the eye and remains in the eye as a foreign body. Either drops in the vitreus or imbeds in the inner coat of the eye. The most dangerous body is considered a piece of copper, probably from the nature of the wound in which those things are usually gotten.

Dr. Miller introduced a piece of copper into the eye of a monkey and perhaps a month or six weeks afterwards the eye did not show any signs of trouble. Dr. Davis was there afterwards and saw the same monkey and for several months there was no sign of trouble.

The case spoken of by Dr. McHenry of the child's injury by a milk bottle: I would consider that case out of danger. However, only for the reason that he did not have iridocylitis.

One doctor claims to be able to tell from a microscopic examination of the eye in which the transference took place, whether there is a case of transferred ophthalmia, and without knowing the condition of the other eye.

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I had the misfortune of seeing two cases injured with dynamite caps about a week ago. Children had picked them up on the railroad and put them on a stone and took a hammer and hit them and one little fellow was about two or three years old and the other one about six. They both had penetrating wounds in the eye in the corneosclera and intensely inflamed. Both of these cases should be watched closely because the chances are they will both develop into cases of sympathetic ophthalmia, and they should be watched.

HEMORRHOIDS.

By Ira W. Robertson, M. D., Dustin, Okla.

In Moses' time the people were instructed by the priests to prepare golden images of their Emirods or Hemorrhoids, place them in the ark of the Lord and return the same a trespass offering to the Israelites from which they had taken it; this they did and were accordingly healed; but as we have neither Moses nor the prophets and the medical treatment is a failure, we are compelled to resort to some operative method for the relief of this condition.

My object in writing this paper is to try to show some of the objectional features of some of the more common operative methods that are practiced today. In the beginning I shall say that no operation in surgery has been performed as often and as many times with the amount of success as that for the relief of hemorrhoids, and when we take into consideration the qualifications of the many operators, the many and various methods practiced by the inexperienced, it's astonishing at the results obtained, and this record is more remarkable when we consider the various methods that are applied indiscriminately, regardless of the pathological condition, and yet the results are so brilliant that we have but little room for criticising any particular method or operator. However, there are two great principles that we should keep in mind; first, complete and permanent control of hemorrage; second, the preserving of the function of the parts. If these two principles are kept in view, our results will be a success regardless of the operative method, but a glance at the literature in this field will bring to view so many methods, both old and new, that it seems impossible to adhere closely to these principles. The clamp and cautery fall, short with but one exception, or rather, to one particular pathological condition, viz., in the old, long-standing cases where the pile-tumor is old and hypertrophed, where there is a thickening of the mucous membrane as well as the wall of the tumor and in addition a partial prolapse of the rectum, which is the condition in all old, long-standing cases, where the tumor comes down and out during defecation.

In this particular class the clamp and cautery is the ideal, for here you not only do your work with a reasonable amount of safety so far as hemorrage is concerned, but the contraction as the result of the burn will help to take up the slack in this neighborhood and in this way relieve the partial prolapse; but in the young tender pile that bleeds so easily during defecation and is yet too young to be caught in the grasp of the sphincter is the one that gives us so much worry and dreaded post-operative hemorrage.

The Pennington operation which I have been rather partial toward is a good one, especially in the originator's hands, but it does not always

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assure us a permanent control of hemorrage; besides, it leaves a large, raw surface.

The old-fashioned ligature, with the sloughing stump and the injective method, are only mentioned to be condemned.

The Whitehead operation is one I have never seen; in fact, I have heard it condemned by good surgeons, and even teachers, till I have not given it my attention.

After a scant review with some objections to the above mentioned methods, I want to say that the Pilcher method of operation has appealed to me over all others. First, for its ease and simplicity; second, for the assurance of permanently controlling the hemorrage and for the preserving of the functions of the parts, and last, but very important, it gives the patient less post-operative pain and more comfort immediately afterwards than any method I know of. Before going into the description of this method let me say that asepsis or even antisepsis does not fulfill our expectations in rectal surgery. In other words, they are not of the same value in this field as they are elsewhere from the fact that our patient rarely dies and I doubt if it ever occurs from infection alone. It seems that if any part of the human body is immune to infection, it is the rectum, and if there is any part of the anatomy that can resist more abuse, traumatism, and rough handling and yet retain its full function than the rectum, I would like to know where it is. Our only dread is one or the other of the above named principles, viz., hemorrage or loss of function. And as a safeguard to these I have adopted the Pilcher method.

The patient is prepared in the usual way. When the sphincter has been dilated and the hemorrhoid drawn down to the anal margin, the tumor is picked up by the most dependent part with the hemostat or thumb forceps. The tumor is now grasped with a narrow curved forcep parallel with the long axis of the rectum and tightly clamped. If there are but one or two tumors, the clamp forceps may be applied about the base of the pile, but if there are four or five tumors to deal with, we should not grasp more than about two-thirds of the tumor. After the pile has been clamped, a full curved Hagedorn needle armed with a No. 1, 10-day catgut is carried about one-eighth of an inch beyond the point of the clamp forcep through the mucous membrane and around the vessel that supplies the hemorrhoid and out a quarter of an inch from where it entered and tied. (The needle thread is not cut.) This suture secures the blood supply of the hemorrhoid and prevents subsequent hemorrhage. The pile-tumor is now cut away with curved scissors within an eighth of an inch of the clamp. A continued suture passes underneath the clamp and over it until the cut surface is all included. The forcep is then unlocked and withdrawn. A pair of blunt thumb forceps may be used here to invert or push in the edges of the cut surface as you tighten up the suture. In this way you obliterate nearly, if not all, the raw surface, which lessens the pain and prevents the parts from sticking, and promotes more rapid healing.

In the clamp and cautery, as well as in the Pennington method, the tampon dressing is recommended, which gives the patient more or les pain and discomfort and will have to be removed in about 48 hours, which is too soon for the parts to have healed. On removing the tampon I have seen secondary hemorrage occur in both methods of operation, after apparently a perfect technique in the hands of good surgeons.

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Dr. Pilcher, of Brooklyn, says that after twelve years of experience he has not had either hemorrage or severe wound infections following this method: the ease and simplicity of this method and its completeness as a surgical procedure commends it.

The after-treatment consists of an occasional suppository containing morphine ¼ grain, extract hyoscyami 1 grain, and iodoform 3 grains, inserted in the rectum; a piece of gauze with a little carbolated vaseline or dusting powder is placed against the anus, cotton over this and retained in place with a T bandage. The external parts are washed daily and new dressings applied; the bowels are usually moved by the second day.

THE PRIVATE LABORATORY AS AN AID TO THE PHYSICIAN'S HOME STUDY.

By C. D. Blachly, B. S., M. D., Norman, Oklahoma.

In medicine, as in other branches of science, advancement is being made with lightning rapidity. Hardly a week passes without our journal's announcing some new advance or discovery. Much of this progress is being made through the agency of the scientific laboratory. For one to be able to apply much of this newly discovered knowledge, he must be familiarly with the principles on which it is based. For the intelligent application, in practice, of these new discoveries, it is often necessary to follow the exact methods used in their discovery. It is very difficult to get a clear knowledge of a thing by simply reading about it, and still more difficult to retain such knowledge. The discussion of subjects with others interested in them is helpful in study. This advantage is now being given to many of us through the weekly study courses of our county societies, but actual work with the things or similar things of which we read is imperative for the complete mastery of the knowledge gained.

While I have a great respect for my co-workers, still I cannot but feel that many of them are not taking advantage of the opportunities that today are within their grasp. To one who is founded in the science with which we are dealing, it is as amusing to read over the letters of many of the physicians who send materials to a pathological laboratory for examination as to read pages from "Bill Nye." To illustrate: "Is, in your opinion, the inclosed specimen a hook worm or a colon bacillus?" It was a bot fly larva. Or again: "Will you please examine the enclosed specimen of blood for malaria?" The blood in question was smeared over one of the physician's prescription blanks. These requests are absurd, but not unusual ones, and show a total lack of knowledge of the medical science.

We find scattered through the country a class of physicians who are afraid of the modern practitioners being "Too scientific." They really belong to the class of Ross and Mehl, so we need not give them serious consideration. The man who is too scientific in his practice is yet to be born.

Every physician worthy of the name needs at his hands a clinical laboratory suffiently well equipped to make all the simple chemical and microscopic tests. He must have these if he expects to practice anything even half way like modern medicine. I am sorry to say that so far as my observation goes very few physicians are so equipped. Lack of funds is

the usual excuse, but as a rule the true reason is indifference. Most physicians will find it necessary to build up their laboratory piece-meal. Many of our men have on hands reagents for making ordinary urine tests, but few of these have them conveniently arranged. In equipping a laboratory the slogan should be, "Have things convenient." The laboratory should be kept clean and comfortable. It may be the physician's study room. Most reagents should be within the reach of the worker while he is seated at his table. The worker must train himself to keep things clean at the table where he is working. Plenty of water, plenty of clean cloth, and a place to put waste materials, are indispensable. Among the things needed are reagents for testing such materials as urine, blood and bile; a good compound microscope, such as sells for from $75.00 to $100.00; the ordinary dry stains, such as fuchsin, methylene blue, and eosin; plenty of reagent bottles; test tubes, etc. A Tallquist scale and haemacytometer are very useful. Many things such as heated stages for the miscoscope, incubaters, centrifuges, and mechanical stages, can be manufactured if one will give his genius half a chance. For a laboratory table one about five feet long and thirty inches wide is convenient. The reagents may be arranged on small shelves at the back of the table. This table is large enough so that one may draw, read, or write while at the table.

The cost of such equipment as outlined should not run over $125.00 or $150.00.

Now as to books and manuals to be used as guides in our work: Let us first look through our Dorland's dictionary. We find it to contain under such heads as stains, reagents, and tests, a vast store of condensed information. We find in our text books on medicine many excellent directions for certain phases of laboratory work. Our pathologies and bacteriologies are full of technique. Of course many guides to clinical laboratory work are now published. We must not forget our medical journals. The A. M. A. is especially rich in such information and should be bound and in the physician's library. Mulford and Parke Davis occasionally get out leaflets giving technique for such things as determining the opsonic index or making vaccines. The U. S. government publishes circulars on technique now and then and will mail them free for the asking. A little search will bring plenty of such literature to our hands.

But now since we have our laboratory equipped and our guides in technique, what are we going to do? Where are we going to begin? Perhaps the best place for the novice is on the simple useful tests. These well performed may be lifesavers. He can take up something such as normal urine and subject it to all the various chemical tests to see how it behaves. After he has familiarized himself with the normal urine he can add such things as mucus, blood serum, bile, and sugar and apply the tests for these, comparing these reactions with the normal. With the microscope normal blood can be worked out, and the types of cells studied. At the same time such things as coagulation time can be investigated. The various ways of making blood smears can be mastered. The chief reason that most persons' technique is so poor in doing these things is that they never do enough of them to become expert. From these simple beginnings one can pass to the more difficult tests and experiments. The only way to really progress is to start out to do some definite thing and keep at it until it is accomplished. In such work a real student will keep notes of what he does. At times two or three weeks may elapse when one can give little or no time to his laboratory,

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but if everything is always ready and he knows just what he is going to do when he again has an opportunity to take up this work, progress will be made. Work as here outlined supplementing one's reading will bridge over the chasm between theory and practice and broaden the vision of the practitioner. He can thus verify his reading with something tangible. As actual travel in connection with the text book study of geography gives the student a clearer knowledge of geography, so does actual laboratory work in connection with his reading give the phyiscian a greater mastery of his science.

A PLEA FOR A MORE LIBERAL DIET IN TYPHOID FEVER.

Dr. A. H. Bungardt, Cordell, Oklahoma.

Until the past few years, the question of diet has, as a rule, been considered of minor importance.

1835 marks the beginning of an increased diet in typhoid fever, when Graves revolutionized the diet problem.

Austin Flint in 1870 popularized the sweet milk diet, permitting about two quarts in twenty-four hours, the practice of which was followed for about thirty years. At the present period of propholactic medicine, and surgery, begins the dawn of a most valuable assistant in allowing our patient suffering from typhoid fever a far more liberal diet, and if we are able to demonstrate it will do no harm in this particular disease, then to apply the same procedure in other wasting diseases will be quite acceptable.

Before deviating from the long tried starvation method, we must demonstrate that to increase the nourishment does no harm, and if substantiated, then to administer such quantities that will prevent the usual losses so commonly found in these cases, will be welcome. Remembering that there is a vast difference between properly nourishing and improperly over-feeding a patient.

The selection of the kind of nourishment is not a difficult one as a rule, and to be guided by the effect produced upon the patient is quite interesting. The questions that naturally present themselves are:

1. Should a patient suffering from typhoid fever have enough nourishment to at least balance the losses therefrom?
2. How much is necessary?
3. What kind of nourishment is best suited?
4. How administered?

As to whether a typhoid patient will permit much nourishment, we are confronted with the pathological conditions, produced by the fever, and by the so-called "toxic distriction," and since the entire human mechanism is very much impaired, and the intestinal tract receives the brunt of the disease, it is also clear that the normal power of absorption is also below normal. The secretory organs perform their functions in a subnormal manner and we find the characteristic bowel movement, and with a persistant tendency to the formation of gas.

(Read at the Meeting of the Frisco System's Medical Society, at Springfield, Mo., May 13, 1912.)

Since in typhoid fever we have the entire bowel contents in a liquid state and a constant absorption of same produces an autointoxication, if it were possible to exchange the infected material for an easily digestible form of liquid nourishment, we would eliminate to a large extent this condition, but since this is impossible, then the nearer we can approach this condition the better will be our patient. In other words, if the bowel contents of our patient is mixed with an easily digestible and concentrated form of nourishment and there is no untoward symptoms therefrom, why is not his chances for improvement better than one who has very little in the intestinal tract than the infected material that is found in these conditions? The dreaded hemorrhage and perforations are no more liable to occur than otherwise, and if such should happen, the patient is in much better condition to withstand the shock.

Concerning the question as to how much nourishment is necessary to balance the losses due to the fever and toxic destruction during the course of a case of typhoid fever, we know that this varies largely with the patient and severity of the disease, and that a loss of from one-fourth to one pound daily is not an unusual occurrence.

We read from Dr. Warren Coleman's article in the A. M. A. Journal, 1909, that a normal man at rest requires approximately fifteen calories for each pound of body weight and an additional twenty-five per cent is required to meet the febrile increase in heat production, thus making a total of twenty calories for each pound of body weight, or about 3000 calories for an individual weighing 150 pounds, in order to hold the patient from neither losing nor gaining. This being a minimum requirement, we should have an excess of this, depending on the absorptive powers of the individual. We find that patients do better if they are given 4000 or 4500 calories during the 24 hours and with a continual increase so long as the digestive powers are not overtaxed. Agreeing with Dr. Coleman that 3000 are required and in making an effort to administer same, we are confronted with the question as to what kind of nourishment should be selected. Should we select the time-tried buttermilk diet? We must (according to Freidenwald and Ruhrah) give our patient ten (10) quarts of buttermilk in twenty-four hours, since the food value of buttermilk is 320 calories per quart. This would be somewhat out of the question. A patient taking a glass of buttermilk every four hours, will take six glasses in twenty-four hours, and since a glass usually holds six ounces and never more than eight, he will take not more than 500, or about one-sixth of the amount required to balance the daily losses.

Should the once sweet milk diet be selected, and since the food value of sweet milk is 640 calories per quart, it would be necessary to give five quarts of sweet milk in the same length of time, in order to maintain the balance, but if he is given six glasses every twenty-four hours he will take three pints, the food value of which is 1000 calories, or one-third of the amount necessary.

Beef juice is of very little food value, amounting to about 450 calories per quart.

Omitting farther examples, it is readily seen that to administer 4000 or 5000 calories it is impossible to make use of the above examples alone, but to select a more concentrated form of nourishment, and to be given at regular intervals. One that requires very little effort of digestion,

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causing no bowel disturbance, capable of producing as little gas as possible, agreeable to the patient, and one that can be taken at length without becoming tiresome.

The last five years we have found the following to agree with the greatest number of patients, varying the amount with the patient, and given within twenty-four hours:

6 to 9 raw eggs	420	to	540 Calories.
1 to 2 qts. sweet milk	650	to	1300 Calories.
2 to 6 oz. sugar of milk	240	to	700 Calories.
1 pint cream	1300	to	1300 Calories.
6 oz. jelatin	600	to	600 Calories.
	3210		4440

Just a word regarding each article:

We select eggs because readily obtained and easily digested, having a food value of 70 calories for an egg weighing 1½ ounces.

Sweet milk in our hands is not at all an undesirable constituent since few patients dislike it; however, if curds are found in the stools, it must be discontinued or the quantity reduced; it does not produce tympanites, and the theory that it is a culture medium for typhoid fever has been exploded.

Carbohydrates protect body protein, better than any other food stuff, and a large proportion of energy can be supplied in this form, and since the sugar of milk is not so sweet, it is more readily taken. We have, as a rule, no more gas when using the sugar than without, but occasionally it produces vomiting or rather regurgitation of the nourishment, which will decrease immediately when the sugar is either stopped or a less amount is given.

In selecting butter, we are enabled to administer it in any of the broths, gruels, etc., that may be given, since the food value is about 225 calories per ounce.

Sweet cream is given for the same purpose, having a food value of 1300 per pint, and if a pint is given within twenty-four hours, it reaches far in protecting the losses of the body fat.

Administration.

Before taking up the method of nourishing a patient, would like to repeat that one must keep constantly in mind that to properly nourish a patient and to improperly over-feed one are two very different things. Each patient should receive very careful attention for the first few days in order that a correct formula of nourishment may be selected, after which the remaining time there will be very little trouble. The severity of the disease, temperament, the likes and dislikes of the patient should be considered. To administer 3000 or 4000 calories the very first day would be a very grave error. The following plan seems to give the best results thus far: For the first one or two days the patient is given very little nourishment, the bowels are flushed several times in order to eliminate as thoroughly as possible the contents of the intestinal tract; this with the usual treatment of beginning typhoid fever finds the patient, as a rule,

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in a fairly good condition to accept nourishment, to be gradually increased, until within the course of five or six days he will be taking enough to sustain the usual losses at least. If nourishment is given every two hours, beginning with 6 A. M. and giving the last at 8 P. M. and neither medicine nor nourishment during the night, if the patient rests well, thus making an effort to secure a good rest, making the above modified egg mixture a nucleus around which to build a gradual increasing nourishment and by giving it only at the hours of 6 A. M., 12 M., and 6 P. M. and other intervals, somewhat of a variety may be selected.

The eggs are best given raw, and if beat in a glass until the white and yolk are thoroughly mixed and the cream and sugar added and lastly the glass filled with milk, either sweet milk or buttermilk may be used, and to begin with the following: 1 egg, 2 oz. cream, 2 teaspoonsful of sugar of milk, add enough milk to fill the glass, will represent about 311 calories each feeding, and giving this three times daily would furnish 930 calories. If sweet milk be given twice, and by adding from two to three teaspoons full sugar of milk and from two to three ozs. of cream, we will furnish about 750 calories. If two feedings of broth are given, to which is added from one-half to one oz. of butter, we will add about 360 calories, and at the 8 o'clock nourishment if 6 ozs. of gelatin be given it will add about 600, thus making a total for the day of about 2600 calories. Should the above prove satisfactory for three days and a gradual increase of the above would be in order, the increase should be made of quality and very little quantity. In order to accomplish this, instead of using one egg, two may be used, the cream may be increased one oz., also the sugar of milk and sweet milk added to fill the glass. Should this agree with the patient for three days, and no untoward symptoms manifest, three eggs may be given in like manner with an addition of one ounce of sweet cream, and another slight increase of sugar. Thus at the end of the week the patient is taking:

3 raw eggs	210 calories
4 oz. cream	320 calories
6drams sugar	90 calories
2 oz. milk	40 calories
	760 calories

or 760 calories given three times daily, or 2800 calories given in three, nine feedings to be given during the day.

In giving sweet milk two to four ozs. of cream may be added, also four to six drams of sugar of milk, thus adding to the food value 700 or 800 calories. If something in the way of a warm diet is given twice, we will have no trouble in furnishing butter amounting to 360 calories and lastly six ozs. jelatin at eight, thus we have supplied approximately 4000 calories. In administering the above diet the patient will tire of it less quickly if given in the above manner; the egg mixture may be given as egg nog, or frozen. The frozen mixture is a very pleasant form to administer, especially in children.

The condition of the bowels should receive careful attention; at no time should a patient be permitted to go longer than 12 hours without a bowel movement, and should be accomplished by giving an enemeta. Should there be a tendency to the formation of much gas, the enemeta should be given as often as necessary.

The careful cleansing of the mouth after each nourishment, is also of much importance. Nothing will cause a patient to refuse nourishment so quickly. The mouth should be as thoroughly cleansed as possible after each feeding, using the ordinary mouth cleansing solution that is used for this purpose.

Conclusion.

The above arrangement of nourishment will prove satisfactory in the greatest number of cases. The course of the disease is, as a rule, much shorter; the typical pinched facial expression is seldom seen, the mind is not sluggish, the weight of the patient varies considerable, but it is a very common occurrence to find the weight of the patient the same as on entering the hospital, with an occasional increase of from two to ten pounds.

SUPPURATIVE PLEURISY.

Charles William Heitzman, M. D., Muskogee, Oklahoma.

Perhaps of all affections of the human body that belong to the territory which the Germans so well designate as "Grenzgebeit," the border land, those of the chest stand preeminently first. These border lands, for the welfare of human kind as well as for our profession, are being recognized more and more. If properly cultivated their recognition can only make the surgeons better doctors and the doctors more cognizant of surgical possibilities. No other field more than that of surgery of the chest can illustrate better the wisdom of the surgeon and doctor living together in harmony. No doubt many a case of pleurisy seems primary from a clinical standpoint, which is really not so. The disease antecedent to the pleurisy may be so slight as to present no symptoms and attract no attention. The pleurisy appears as an apparently independent disease and is the first thing which attracts notice to the previous existing affection. Exclusive of traumatic pleurisy resulting from such injuries as a penetrating throracic wound, we know positively of only one form of pleurisy, viz., the rheumatic—which is primary. This is, from an aetiological point of view, most closely allied with acute articular rheumatism. In polyarthritis it is not very exceptional to have pleurisy develop secondarily. In many cases the rheumatic affection attacks the pleura at first without any great involvement of the joints. Then follow articular trouble, endocarditis, and the like, confirming, or for the first time disclosing the aetiology of the attack. Whether still other pathogenic influences may produce primary pleurisy is not settled. Some cases of acute pleurisy setting in with high fever, we have felt justified in referring to diplococcus infection, as suggested by the association of herpes and other symptoms. In such instances it is scarcely possible to exclude with certainty the presence of a small focus of pneumonia. In genuine primary pleurisy the pathogenic germs must first enter the circulation and by that means reach the pleura. It is usually pretty easy to diagnose pleurisy. In most instances all that is required is to know how to auscultate and percuss, in other words, know how to elicit the physical signs which nearly always patients present. Still mistakes do occur, pneumonia with its circumscribed dullness on percussion is perhaps the most frequent, but with its crepitant rales and the characteristic rusty sputum, as well as increased vocal resonance should enable one to differentiate. Rarer diseases, more or less exceptional, such as cancer of the lung or pleuro pulmonary cancer may lead us astray, but

here exploratory puncture, hemoptysis, a rusty expectoration and occasionally the recognition of neoplastic elements in the sputum will exclude pleural effusion. Radioscopy is also of value in these cases. Another misleading condition of the pleural cavity is hydatid cyst of the lung. I have seen one such case. Diagnosis was made by the presence of the hooklets in the serum. Large abscesses of the liver, those that extend far upward and do at times open into the pleural cavity, may well simulate purulent pleurisy. Patches of pulmonary gangrene although characterized by well marked foetor of the breath and sputum is frequently diagnosed as suppurative pleurisy. Having established the diagnosis of pleural effusion the next proposition is, what kind of an effusion is present. As a rule cases of serous pleurisy do not give us as high a thermometer reading as in purulent pleurisy. Of course there are cases of suppurative pleurisy in which the temperature does not run high but this is not the rule, whereas when the effusion is sero fibrinous, in the absence of concomitant pulmonary lesions, the temperature remains low. The temperature chart of purulent pleurisy presents the usual appearance of fever accompanying foci of suppuration, wide oscillations low in the morning and high in the evening. This steeple temperature is of great importance in the diagnosis of purulent pleurisy. With regard to the oedema of the chest wall the diagnosis should be made long before the manifestation of this late sign. Only in very doubtful cases is it necessary to have recourse to exploratory puncture in order to determine the nature of the effusion. With the early state of tuberculosis or pleuro pulmonary cancer we may have a hemorrhagic pleurisy slow and insidious in its course many times coming as an operative surprise, being recognized only on operation. Doubtless exploratory puncture is of great assistance in these cases. Suppurative pleurisy is apt to supervene after pneumonia, and in the course of certain eruptive fevers such as smallpox, scarlatina and puerperal fever, in fact in the course of any grave infection; sore throat, influenza, etc. We must not be satisfied on the establishment of a diagnosis of purulent pleurisy, we must ascertain the nature of the pus which may be pneumococcic, streptococcic, staphylococcic, typhoid, tuberculous or a mixed infection. This element of the diagnosis is of importance because the prognosis differs according to the materies morbi. Pneumococcic empyema following a pneumonia does not as a rule provoke a marked rise of temperature. The pus in such cases is greenish with fibrinous flakes. The type of pleurisy that is apt to supervene in the course of puerperal infection is usually streptococcic and runs a rapid course, the patient is profoundly infected, the complexion is earthy and the temperature remains around 103 and 104 F., without pronounced remissions. Then, too, the effusion tends to be copious. Purulent pleurisy with typhoid bacilli comes on during an attack of typhoid fever and is easily diagnosed.

Tubercular subjects presenting apical lesions often times develop a pleurisy in most instances serous in the beginning but becoming purulent without any assignable reason. In some cases the pleurisy is purulent from the start. The concomitant pulmonary lesions associated with the tuberculous bacilli assists us in diagnosing these cases.

Diabetic patients are peculiarly liable to gangrenous pleurisy. This is a form of widespread gangrene of the lung with an effusion that is purulent from the start, as it is often a gaseous pleurisy, it may be accompanied by pneumothorax. This constitutes gaseous suppurative pleurisy consequent upon the pulmonary gangrene. Pleurisy due to mixed infections present no

characteristic features from a clinical point of view. We also meet with cases of foetid gaseous purulent pleurisy apart from the particular microbe involved. In these effusions we find anaerobic organisms whatever has been the port of entry of the microbe. The diagnosis is based on bacteriological examination of the pus, and also by the severity of the constitutional and functional symptoms. An exploratory or curative incision gives vent to much gas. As a rule the prognosis is very grave. The mildest variety of this form is that associated with the pneumococcus and it sometimes yields to one or two enacuative punctures. These particular cases make an attempt toward spontaneous recovery by rupture of the cavity into a bronchus or the pus may escape, it is said, through an opening between the ribs, this latter must be a rather rare occurrence. Cases have been recorded in which it is claimed that the pus escaped in the lumbar region, but these instances must be very exceptional. Along with purulent pleurisy of the main cavity of the pleura we see some odd forms of encysted purulent pleurisy. These may be divided into two groups. First, the interlobar variety found opposite the first or second interlobar fissures. The diagnosis of this variety of pleurisy is rather difficult. Radiography shows a zone of shade corresponding to the situation of an interlobar fissure. This form of pleurisy is less serious than ordinary suppurative pleurisy because the pus is, as a rule, easily gotten rid of by vomica. Second, encysted pleurisy in the form of an abscess of the lower antero-lateral part of the thorax. Here we find one subcutaneous pocket communicating through a button hole orifice with the intra-pleural collection. I recently operated on a case of this sort. The patient, a woman thirty-seven years of age, complained of soreness in her right side. Examination revealed a fluctuating mass which was incised and the opening described above was found communicating with the pleura Quite an amount of pus was discharged and the discharge continued for several weeks all healing but a small sinus, this sinus yielded to an injection of bismuth paste. These cases are some times called cold costal abscesses, but as a matter of fact we are dealing with encysted pleurises of the lower pleural cul de sac. The prognosis of suppurative pleurisy depends largely upon the casuative microbe. Those patients suffering from the streptococcic type are profoundly infected and rarely recover. Typhoid pleurisy is recovered from as a rule. In suppurative pleurisy due to mixed infection the patients usually die, but the prognosis based on the variety of microbe is not mathematically correct. Tuberculous purulent pleurisy is usually fatal. They soon succumb and an operation simply hastens their end. From the intensity of the symptoms, however, we are often forced to operate. Another point that aggravates the prognosis in tuberculous purulent pleurisy is the co-existing pleural fistula due to the fact that after evacuation of the pleural contents the walls of the cavity cannot come in contact, that is to say, the rigid costal wall cannot follow the shrunken lung which is sclerosed and lies against the spinal column. These fistulae occur in about seventy-five per cent of these cases.

The proper and only treatment is an early pleurotomy, an incision of the sac. These patients being as a rule profoundly infected bear general anesthesia badly. Gas and oxygen in the hands of an expert may be used, but wherever possible local anesthesia is the one to be recommended. The actual operation of pleurotomy is simplicity itself. We cut through the soft parts of the intercostal space, following the upper border of the rib, avoiding the lower border where are the vessels and intercostal nerves. In order not to wound the diaphragm we do not go lower than the fifth or sixth intercostal space in the axillary line. The best point for incision, how-

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ever, is retro-axillary four fingers breadth from the spinal column because it corresponds to the lower part of the pleural cavity when the patient is lying down and must, therefore, facilitate drainage. Of course the operater may elect to remove a portion of one or more ribs depending entirely upon his judgment, and it is almost the rule to resect a couple of inches of rib. Having avacuated the pus shall we irrigate the cavity? No, unless we are dealing with a fetid gangrenous pleurisy or in the presence of false membranes. Now as to drainage, which is important. All methods employed should have for their object a rapid and continuous evacuation of the pus secreted by the pleura, thus preventing the formation of a pleural fistula. Bulau's method stands as a type, consisting of continuous aspiration. This is performed as follows, after the exploratory puncture a small incision is made into the skin over the intercostal space and a small trocar is thrust into the pleural cavity. Having gotten rid of the greater part of the pus a rubber tube is substituted for the canula as a drain. This tube is fixed to the thorax by means of safety pins the free end is adapted to a rubber bulb which exerts a direct aspiratory action on the pleural contents. The method described by Eber's in Annals of Surgery 1910 and 1911 for the treatment of empyema by means of differential pressure is thus described. The air within the abscess cavity becomes negative during inspiration, and this tends to expand the collapsed lung. There is no odor in the sick room, the amount of discharge can be accurately gauged, and frequent dressings are unnecessary. The author makes a circular skin incision, excises the rib with Giglis' saw, and stops the cut ends with Horsley's paste. A moulded rubber tube having an upward curve, so as to prevent painful pressure on the diaphragm, is then introduced through a tapered rubber cone already in situ. The flange of the cone is fixed to the skin by means of strips of zinc oxide plaster. An oval felt pad smeared with zinc oxide ointment and covered with a square of dentist's rubber dam may be introduced between flange and the skin, thereby making the joint more secure. The tube connects with a glass bulb which serves as a collector for the discharge. Connecting with the lower end of the bulb is a valve to permit of exhaustion of the cavity and bulb. Between the bulb and chest wall is fixed, on tube, another valve which occludes tube while bulb is being changed. If the discharge is profuse capillary leakage may occur for the first few days but pneumothorax is absolutely prevented. Other means having the same object in view are used, as for example, the drainage tube is attached to a large empty bottle; a vacuum is maintained in the bottle by use of a suitable pump. In the treatment of the so called chronic cases of empyema especially those with persistent discharging sinuses the use of bismuth paste and of the bacterial vaccines are not to be forgotten. Likewise a whole series of operative measures have been advocated for the relief and cure of these patients, notably the different thoracoplastys, anterior, posterior, inferior and a combination of the preceding with multiple lateral resections as best represented perhaps, by the operation of Estlander. The operation devised by Delorme in 1902 and known as pulmonary decortication, with various modifications, is now attracting considerable attention.

References not quoted in text: Strumpell, Mauglaire.

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A NEW WAY TO PRESERVE PATHOLOGICAL SPECIMENS.

Dr. W. D. Berry, Muskogee, Oklahoma.

All appreciate the importance of the study of gross anatomy and that the only way to have a clear understanding of the subject is by doing careful and persistent work in the dead room. No one has ever been able to give us an understanding of gross anatomy without our having an opportunity to see, handle, weigh and measure the various tissues as they normally exist. The same can be said of gross pathology; therefore our opportunities for examining and studying pathological specimens should in every way possible be facilitated. Anatomy is normal and is nearly always found typical, while on the other hand, pathology being abnormal, is seldomdom found typical, which naturally makes pathology more difficult to

Fig. 1. Anterior view of section of bowel. A. Undeveloped portion of ileum. B. Caecum. D. Normal colon. M. A very short mesentery.

understand. To the operator his knowledge of the shape, size, color consistency, etc., of pathological specimens is just as important as his knowledge of his local anatomy. Various methods have been employed to preserve specimens, nearly all of which are more or less successful, so far as being able to keep them from disintegrating is concerned; which is all that is absolutely essential in a solid specimen, or in fact, any kind of a specimen where the microscopic pathology only is being considered, but if a hollow collospsible specimen is being studied in the gross or being photographed, it cannot be appreciated unless its shape, and size can be preserved, which, however, is very important where there is a faulty physiological development in connection with a pathological specimen, as in the case shown in Figure No. 1, which is a portion of the ileum, the caecum and part of the ascending colon, total length 11½ inches, which we removed to relieve an obstruction due to an intussusception of the ileum into the caecum

Fig. 2. Posterior view of Fig. 1. A. Straight, stiff and unnatural appearance of a normal appendix, hardened around an ordinary match.

in which we did a lateral anastomosis, the invaginated portion of the ileum, which is four inches in length is only $\frac{5}{8}$ of an inch in diameter, the normal ileum above that point is $1\frac{1}{8}$ inches in diameter. The mesentery of the undeveloped portion of the ileum is extremely short and but few blood vessels passed through it. The colon is much smaller at the junction of the caecum than normal, being only $\frac{3}{4}$ of an inch in diameter. The normal caecum should be the largest portion of the large bowel which is only $\frac{7}{8}$ of an inch in diameter in this case, whereas the colon four inches above the ileocecal junction is $1\frac{3}{8}$ of an inch in diameter. The dimensions of this specimen are accurately stated. Figures No. 1 and No. 2 are cuts made from photographs showing it as it appeared in the abdominal cavity, after the invaginated portion of the bowel had been reduced.

Fig. 3. Cut from a photograph of ovarian cyst removed Dec. 14, 1911. Sack with contents weighed $6\frac{1}{2}$ lbs.

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Am stating these dimensions to show how accurate a specimen of this kind can be studied, if distended and preserved in the manner in which this was done, which is very simple and easy of accomplishing. First, the specimen should be cleansed by washing in plain water, then, put a very thin rubber tube on the inside and distend by filling the tube with air until the normal shape is assumed, which can be positively assured, as pressure will be equal at all points. In this specimen I used ordinary toy balloon, which is seen for sale on the streets, the only one I could get was green in color and that accounts for the dark picture. Had the balloon been lighter the photograph would have been lighter, as the color of the rubber shows through the specimen. Rubber glove fingers, etc., can be used to distend specimens; it would be an advantage, however, if we could get rubber tubes in various lengths so it would only be necessary to use one tube in each specimen. In this case I had to use two of the balloons, one in each end of the specimen, after distending and closing surface openings with a suture. I left it in a weak solution of formaldehyde (3%) for 14 hours, then washed with plain water and allowed to dry in open air, which it did in about 12 hours, and then remain in the open air ever afterwards. It now has the appearance of being well preserved and will remain the same size and shape as when hardened in the formaldehyde solution.

Figure No. 3 is a cut, half tone, from a photograph of an ovarian cyst, irregular in shape, measuring 10 inches in its largest diameter and 4½ inches in its shortest, which I distended in the same manner as above described six months ago. The rubber balloons have, of course, given away, but the tumor has remained the same shape and size as when hardened. Is in an excellent state of preservation, as dry as a drum head and has the appearance of keeping indefinitely.

EDITORIAL

AUTOTHERAPY IN GONORRHOEA.

Dr. Charles H. Duncan of New York has lately proposed something in the way of an innovation in the treatment of gonorrhoea that will likely cause some discussion not heretofore indulged in.

Autogenous vaccines have been used with varying success in the treatment of gonorrhoeal conditions for some time, but this step in that direction is certainly a radical departure. Dr. Duncan simply feeds the patient his own pus or a filtrate of the same and cites some cases as evidence of its therapeutic value and believes that the treatment should be given a further trial.

It is doubtful that this treatment would prove popular even if it could be shown that it was remarkably successful for the natural repugnance of the patient to such treatment would become a very great obstacle and prevent him accepting the treatment. When this is considered it is likely that we will stick to the old and approved ways. We might sweeten up and disguise a little of the patient's pus and in the desperate and long drawn out cases slip him a pill of the mixture "unbeknownst," but it is likely that there would be no room for the physician with his patient in the same town if the patient ever heard about the therapeutic measure being used on him.

A full description of Dr. Duncan's theories and cases appear in the Medical Record for March 30, 1912.

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A MEETING OF STATE SECRETARIES.

The meeting of the American Medical Association at Atlantic City provided for a session of all State Secretaries to be held in Chicago, probably some time in October for the purpose of carrying out and putting into execution the proposed regulation of membership matters which have been for some time a trouble maker and a stumbling block in the Association's affairs. The result of this meeting will in all likelihood make every member of a county society a member of the American Medical Association, make him a member of the county society wherever he goes and answerable to the society of his residence for his acts and create a new body in the Association, which body will be known as Fellows of the A. M. A.

It has been proposed that all subscription to the Journal be made optional and not a requisite of membership as it now is and that what is now known as membership will in reality become Fellowship.

This will meet with the approval of a great many men in the profession who think that membership and subscription to the Journal should be independent matters. It should not hurt the Journal in the slightest for the place now filled by members will largely be filled by the newly created body.

THE ATLANTIC CITY MEETING.

The meeting of the American Medical Association this year was one of the largest from the stndpoint of attendance ever held, the registration being 3,600.

The scientific sessions had the advantage of being attended by more than the usual number of the well known men of the profession and as the social end of the session was relegated to an unimportant plane the scientific sessions did not suffer as they sometimes do from outside diversions. Mr. Woodrow Wilson who addressed the general meeting was an added attraction and the remarkable vitality of the aged President, Dr. Abraham Jacobi, who presided over all meetings of the House of Delegates, was also a matter of universal comment. Dr. Jacobi is in his eighty-second year, but notwithstanding that, was able to endure the turmoil of the House of Delegates without apparent fatigue. The House of Delegates on several occasions was more than peppery and more than once the speakers became somewhat personal over the transactions.

Th fight of the occasion centered on the re-election of Dr. M. L. Harris of Chicago to the Board of Trustees and was carried on by the successors of the old fight on Dr. Simmons. Dr. Harris has for years been one of the most active men in the Association's affairs and as resident trustee in Chicago is often called on to carry on the work of the Board. His services were acknowledged in a most emphatic and fitting manner in the speeches seconding his nomination and the delegates from almost every section of the United States attested their confidence in him by their approval of his candidacy.

The signal honor of the Presidency went to Dr. John A. Witherspoon of Nashville, Tennessee, one of the most highly respected and beloved men in the American Medical Profession today.

Minneapolis was selected for the 1913 meeting place.

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DO YOU HELP IN THIS MATTER?

Sotmetime ago a movement was started to influence the different state medical journals and those in sympathy with the propaganda for reform as conceived and carried out by the Council on Pharmacy and Chemistry of the American Medical Association to eliminate from the advertising pages all matter carried by houses not in keeping with the standards set by the Council.

Putting this policy into execution has caused the Journal of the Oklahoma State Medical Association to lose some of the financial support formerly enjoyed, for it is a fact that advertising sells the product and not the merits composing it, and they are as ready, willing and often more able to pay than a legitimate manufacturing chemist is.

In order to make the policy of the American Medical Association effective as it should be it will be necessary for the physicians of this state to co-operate with the Association and in order to do so you should begin yourself a process of elimination. You may like the drug or compound you now use, but if its manufacturer does not support the respectable and authoritative Council on Pharmacy you should show which side you sympathize with and demand that the detail man make good in his statements and if they do not correspond with the investigations of the Council drop them and use the ethical preparation.

The manufacturer should be shown that he cannot detail a preparation to the profession one day and the next advertise it in the daily papers or in other questionable manner. The Council has repeatedly shown that advetisers claiming an ethical standard and demanding the support of the ethical medical profession in the United States have been most flagrant violators of ethics. In England they have shown that on the operation of the Food and Drugs Act in the United States sweeping changes in the labels have been made in this country while the English label, with its extravagant claims remains as it was simply because there is no law to make them tell the truth about it.

There is another phase probably not thought of by very many members of the Association and that is the support given the Journal by the houses whose preparations you daily use. Very few of these houses carry advertising in the columns of the journal you own and publish; in some instances they are distinctly hostile to state medical journals and to the Council on Pharmacy and Chemistry of the American Medical Association. This hostility to the last named body can only be due to their desire to have no publicity on their affairs and to be allowed to go on about their way over the land making claims for their products that very few general practitioners are able to investigate and disprove or substantiate to their own satisfaction and the practitioner must either accept their statements or those of the Council. There is no gain in the Council refusing to give a product a clean bill of health to the medical profession if they are justly entitled to it and the Council does not do so. The Council is an impersonal investigator of the composition of products placed before it, it has no axes to grind, and no favors to give one manufacturer over another, all things being equal. With this in mind the profession should unite in the Council's support and demand that houses detailing products in Oklahoma support the journal with advertising if they do advertise to the profession in the southwest, otherwise we do not want the advertising. You may rest

assured that no advertisement will be accepted by your state journal whose manufacturers do not comply with all the essential demands and tests of the Council on Pharmacy and Chemistry of the American Medical Association as long as the present policy prevails, so when they come to you with something to sell just ask them who they advertise with and for their standing with your paid investigators.

PERSONAL NEWS.

Dr. and Mrs. C. J. Fishman of Oklahoma City will sail for Vienna in July and remain in Europe during the summer.

Dr. J. W. Kerley of Cordell has returned from a post graduate trip to New York City.

Dr. R. R. Smith of Muskogee has been doing some special work in Kansas City.

Dr. A. H. Bungardt of Cordell will spend July in the Chicago clinics.

The following Oklahoma physicians were in attendance at the Atlantic City meeting of the American Medical Association: E. S. Lain, Wm. Taylor, L. F. Watson, Oklahoma City; John W. Duke, Guthrie; W. E. Wright, Tulsa; C. A. Thompson, Muskogee.

Dr. A. B. Montgomery of Muskogee has returned from an extended visit to Northern points.

Dr. J. Hutchings White, of Muskogee will spend part of the summer in Boston doing work at the Harvard Medical School.

NEW BOOKS

THE PRACTICAL MEDICINE SERIES for the year 1912, under the general editorial charge of Gustavus P. Head, M. D., Professor of Laryngology and Rhinology, Chicago Post-Graduate Medical School, and Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

Volume I.

GENERAL MEDICINE, Edited by Frank Billings, M. S., M. D., Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago, and J. H. Salisbury, A. M., M. D., Professor of Medicine, Chicago Clinical School. Series 1912. Cloth, 404 pages, illustrated. Price of this volume, $1.50. The price of the complete set of ten volumes issued annually from time to time during the year 1912, which comprise this series, will be $10.00.

As heretofore stated in reviews touching this series of books, they are reviews of recent work of the medical profession with editorial comment where deemed proper by the editor. The scope of the present little volume may be understood when it is noted that eighty pages are devoted to the subject of tuberculosis alone, the remainder of the work being applied to other medical subjects.

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Volume II.

GENERAL SURGERY, Edited by John B. Murphy, A. M., M. D., LL. D., Professor of Surgery in the Northwestern University, Attending Surgeon and Chief of Staff of Mercy Hospital, Wesley Hospital, St. Joseph's Hospital and Columbus Hospital, Consulting Surgeon to Cook County Hospital and Alexian Brothers' Hospital, Chicago, Illinois. Series 1912. Cloth, 616 pages, Price $2.00.

CHICAGO, THE YEAR BOOK PUBLISHERS, 180 North Dearborn Street. This is a very well illustrated book, more so than its predecessors of

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PITUITRIN IN DIFFICULT PARTURITION.

Much attention is being given by the medical press of Germany and other European countries to the importance of Putuitrin as an oxytocic. The drug has been somewhat extensively used for the past two or three years, both here and abroad, chiefly, perhaps, as a hemostatic and heart stimulant. Now it is known to be of great value in uterine inertia, obstetricians in many of the German hospitals and elsewhere who have thoroughly tested it clinically, pronouncing it a truly remarkable oxytocic.

For the benefit of practitioners who may not be familiar with its origin and nature, it may be explained that Pituitrin is an extract of the posterior or infundibular portion of the pituitary gland. Although the physiology of this gland is as yet largely speculative, there seems to be no doubt that it contains a substance or substances that exert a considerable influence over the metabolism and on the cardio-vascular system.

As bearing upon the value of Pituitrin in parturition, this expression from Dr. Emil Vogt, of the Royal Gynecological Clinic at Dresden, is significant:

"The oxytocic action of Pituitrin at this clinic was observed in over one hundred cases. After the rupture of the fetal membranes, in the second stage of labor, the physiologic effect of Pituitrin is the most pronounced; the contractions of the uterus follow each other much more rapidly and energetically, and the intervals between pains are decreased. Individually the pains are not more severe, so far as suffering is concerned, even in the case of sensitive women, than they would be in a normal delivery. In half of the cases the Pituitrin was administered in the second stage of labor. It failed only once; in all other instances its action was very pronounced. And although we encounter a great many cases of narrow pelvis in Dresden, from 40 to 50 per cent., it was not necessary to have recourse to forceps delivery in a single instance in which Pituitrin was employed. According to our experience, Pituitrin is the ideal oxytocic."

Pituitrin is manufactured by Parke, Davis & Co. It is supplied in one-ounce bottles and in glaseptic ampoules (for convenient hypodermic injection), each ampoule containing one cubic centimeter, or 16 minims, the usual dose.

Parke, Davis & Co. have just issued a pamphlet on Pituitrin as an oxytocic, in which is reprinted not only the extract from Dr. Vogt which appears in this article, but also a number of others from prominent German specialists and practitioners in which Pituitrin is highly extolled as a corrective of uterine inertia. Physicians will do well to write the company, addressing them at the home office in Detroit, for a copy of the pamphlet.

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previous series; a considerable number of illustrations are fine cuts on hard paper, which add greatly to the attractiveness and value of the work. Its scope will be appreciated when it is noted that it contains 616 pages and that there will be a continuation of the work in another volume during this year. Throughout, the book is full of the newer things in the surgical world, and they are arranged in a systematic manner, rendering the subjects easy of access for the reader.

LABORATORY METHODS, With Special Reference to the Needs of the General Practitioner, By B. G. R. Williams, M. D., Member of the Illinois State Medical Society, American Medical Association, Etc., assisted by E. G. C. Williams, M. D., Formerly Pathologist of Northern Michigan Hospital for the Insane, Traverse City, Michigan. With an introduction by Victor C. Vaughn, M. D., LL. D., Professor of Hygiene and Physiological Chemistry and Dean of the Department of Medicine and Surgery, University of Michigan, Ann Arbor, Michigan. Illustrated with Forty-three Engravings. Cloth, 204 pages, Price $2.00.

ST. LOUIS, C. V. MOSBY COMPANY, 1912. In the preparation of this work the authors sought to make a book that would be found of daily and practical use to the general practitioner who has neither the time nor opportunity to go into elaborate detail and expense in making his diagnostic work, and for this reason so often neglected in part or entirely. This book simplifies laboratory work to a very great extent and makes that which at first seems difficult to the beginner and busy man easy. The illustrations are applicable and simplify the text, and the authors, while brief, are thorough and complete in their efforts to make the work one that will be easily understood by the busy general practitioner who wishes to make his own laboratory and microscopic findings. Much of the detail and burdensome technic of the larger works on such subjects is eliminated and the more practical and daily needed information is included.

CENTRAL INDIANA HOSPITAL FOR THE INSANE. Report from the Pathological Department and the Department of Clinical Psychiatry, Volume IV. Cloth, 344 pages, Issued by Wm. B. Burford, State Printer, Indianapolis, 1912, for free distribution.

This volume is a continuation of the very able work of Dr. George F. Edenharter, Superintendent, and the Staff of the Central Indiana Hospital for the Insane. The work contains cuts and charts illustrative of the subject matter and is very creditable. It shows a vast amount of work and preparation in its particular field and will be of value to the neurologist and psychiatrist.

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